

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII 901 NORTH 5TH STREET KANSAS CITY, KANSAS 66101

APR 29 2009

OFFICE OF THE REGIONAL ADMINISTRATOR

The Honorable Charles Grassley U.S. Senator 210 Waterloo Building 531 Commercial Street Waterloo, Iowa 50701

Attention: Jason Mohr

Dear Senator Grassley:

Thank you for your recent letter on behalf of your constituent, Ethan Vorhes, regarding a sink hole. Mr. Vorhes believes that there may be contamination coming from the sink hole which may have caused the death of some of his cattle.

On December 12, 2008, Mr. Ethan Vorhes contacted a member of my staff about some concerns he had over a neighbor's drainage well. The complaint alleged contamination of his drinking water source (private well) from the water entering the drainage well. Mr. Vorhes indicated that he had tested the water entering the drainage well and his test results showed the presence of E-coli as well as elevated levels of coliform bacteria and nitrates. He stated that it was his belief that the contamination was due to the application of manure and pesticides to the land surrounding the drainage well. Mr. Vorhes did not indicate if his private water well had been tested.

My staff contacted Mr. Vorhes and we stated we would look into his allegations. We also told Mr. Vorhes that we would wait until spring to send an inspector as it would be hard to investigate with the snow cover and no water flowing into the drainage well. We also contacted the Iowa Department of Natural Resources (IDNR) for information. IDNR had looked at the site in 1999 and determined that this is not a drainage well but a modified sink hole and as such they had no authority over it. Had it been determined that this was an agricultural drainage well, IDNR would have had some control over its operation.

On March 25, 2009, EPA contractors arrived at the Vorhes farm to follow up on the complaint filed by Mr. Vorhes in December of 2008. The report indicates that at the time of the visit, Mr. Vorhes complained about flooding of his land as a result of runoff from his neighbors. Mr. Vorhes stated that the flooding has resulted in a loss of crop land on his farm and illness in his cattle, as well as contamination of his water well.



A review of the inspection report has shown that the sink hole is located on the neighbor's farm and would be regulated by the Underground Injection Control (UIC) program as an injection well. This is because modifications had been done in order to enhance its capability to drain water (naturally occurring sink holes are not covered by the program). Based on our initial review of the inspection report and the geologic conditions in the area around the well and throughout Floyd County, it is likely that runoff entering this well has partially contributed to the upper Mississippian aquifer that the Vorhes farm uses as its water supply. However, the larger contribution of any possible contamination of the aquifer is from runoff entering the various other sink holes which occur in the area and agricultural drainage wells which were installed throughout Floyd County at around the same time (1915) as the sink hole on Mr. Vorhes neighbor's farm was modified.

EPA's authority is fairly limited and may only deal with the sink hole and not the other drainage issues that have been raised by Mr. Vorhes. Some options that may be available to Mr. Vorhes but outside of EPA's authority to require would include; working with the drainage district to construct alternate drainage on the neighbor's farm, drilling a new drinking water well into the lower portion of the Mississippian aquifer (which is separated from the upper portion of that aquifer and is more protected from contamination) and constructing the well to better standards, or connecting the Vorhes farm to rural water (if available).

Again, thank you for your letter. If we can be of any additional assistance, please feel free to contact me at 913-551-7006 or your staff may contact Jan Lambert, Congressional Liaison, at 913-551-7768.

Sincerely

William W. Rice

Acting Regional Administrator